# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of	
Gregory SIDEBOTTOM et al.	) Mail Stop APPEAL BRIEF - PATENTS
Application No.: 10/751,539	) Group Art Unit: 2619
Filed: January 6, 2004	) Examiner: A. Sol
For: SYSTEMS AND METHODS FOR EXPOSING FUNCTIONALITY WITH STRICT ACCESS CONTROLS	) ) )
U.S. Patent and Trademark Office Customer Window, Mail Stop Appeal Brief - l Randolph Building 401 Dulany Street Alexandria, VA 22314	Patents

## **APPEAL BRIEF**

This Appeal Brief is submitted in response to the final Office Action, dated January 17, 2008, in support of the Notice of Appeal, filed April 16, 2008.

# I. REAL PARTY IN INTEREST

The real party in interest in this appeal is Juniper Networks, Inc.

#### II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

Appellants are unaware of any related appeals, interferences, or judicial proceedings.

### III. STATUS OF CLAIMS

Claims 1, 2, 8-12, 16, 18, 20-24, 26-29, 31, and 33-35 are pending in this application.

Claims 1, 8-12, 16, 20-24, 26-29, 31, and 33-35 have been finally rejected under 35 U.S.C. § 103(a) as unpatentable over Rao (U.S. Patent Application Publication No. 2003/0139174) in view of Chandrashekhar et al. (U.S. Patent Application Publication No. 2003/0220872).

Claims 2 and 18 have been finally rejected under 35 U.S.C. § 103(a) as unpatentable over Rao in view of Chandrashekhar et al. and Hochmuth et al. (U.S. Patent Application Publication No. 2003/0055968).

Claims 3-7, 13-15, 17, 19, 25, 30, and 32 were previously canceled without prejudice or disclaimer.

Claims 1, 2, 8-12, 16, 18, 20-24, 26-29, 31, and 33-35 are the subject of the present appeal. These claims are reproduced in the Claim Appendix of this Appeal Brief.

#### IV. STATUS OF AMENDMENTS

An After Final Amendment was filed subsequent to the final Office Action. The Examiner issued an Advisory Action that did not indicate whether the After Final Amendment would be entered for purposes of appeal. In a subsequent telephone conference, the Examiner indicated that the After Final Amendment would be entered for purposes of appeal.

# V. <u>SUMMARY OF CLAIMED SUBJECT MATTER</u>

In the paragraphs that follow, a concise explanation of the independent claims and the

Claim 2 recites that the service activation component (Figure 1, 145) is configured to configure a router (Figure 1, 170) to deliver the service (page 7, lines 15-21).

in parenthesis, to examples of where support can be found in the specification and drawings.

appeal, along with the dependent claims that are argued separately, will be provided by referring,

Claim 8 recites that the first entity corresponds to a business partner system (Figure 1, 120) and the second entity corresponds to a service activation component (Figure 1, 145), the service activation component provides the service to a customer associated with the business partner system (page 13, line 18 - page 14, line 3), the business partner system generates the message requesting service for the customer (page 14, lines 4-13); and wherein the first interface module (Figure 2, 210) is further configured to authenticate the business partner system based, at least in part, on information included in the message (page 14, lines 14-20).

Claim 10 recites that the message includes a subscriber identifier that identifies a subscriber on whose behalf the service is being requested (Figure 6, 330-1; page 9, lines 19-21); and wherein the second entity locator (Figure 1, 150) is configured to map the subscriber identifier to the identified one of the service activation components (page 15, lines 12-17).

Claim 11 recites an extension manager (Figure 1, 160) configured to facilitate at least one of modification of services in the extensible set of services or addition of new services to the extensible set of services offered by the second entity (page 9, lines 3-7).

Claim 18 recites configuring a router (Figure 1, 170) to deliver the network service to a subscriber (page 7, lines 15-21).

Claim 21 recites that the message includes a subscriber identifier that identifies a

subscriber on whose behalf the requested service is being requested (Figure 6, 330-1; page 9, lines 19-21); and wherein the method further comprises identifying the second entity from a plurality of second entities based, at least in part, on the subscriber identifier included in the message (page 15, lines 12-17).

Claim 23 recites a system (e.g., Figure 1, 100) comprising: a service gateway (e.g., Figure 1, 130) in communication with a first entity (e.g., Figure 1, 120) and a second entity (e.g., Figure 1, 140), the service gateway comprising: a first interface module (e.g., Figure 2, 210) to receive, from the first entity, a message requesting performance of a service in an extensible set of services offered by the second entity (e.g., page 7, lines 17-19; page 13, line 18 – page 14, line 18), the message including a service name that corresponds to the service (e.g., Figure 3, 320; page 10, lines 5-8) and an argument that includes data useful in performing the service (e.g., Figure 3, 330; page 10, lines 9-15); an access control module (e.g., Figure 2, 220) to: make a first determination of whether the first entity is permitted to request performance of the service corresponding to the service name (e.g., page 11, lines 4-5; page 14, line 22 – page 15, line 2), make a second determination of whether the argument is permitted to be provided by the first entity (e.g., page 11, lines 5-8; page 15, lines 2-5), and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name (e.g., page 11, lines 5-8; page 15, lines 2-5); and a second interface module (e.g., Figure 2, 230) to selectively request performance of the service by the second entity based, at least in part, on results of the first, second, and third determinations of the access control module (e.g., page 12, lines 3-11; page 15, lines 10-18).

Claim 26 recites a wholesaler system (e.g., Figure 1, 130-170) that provides services to

subscribers (e.g., Figure 1, 110) associated with a plurality of retailer systems (e.g., Figure 1, 120), the wholesaler system comprising: a service activation component (e.g., Figure 1, 140) configured to provide the services to the subscribers (e.g., page 7, line 15 – page 8, line 6); and a service gateway (e.g., Figure 1, 130) configured to act as a single point of contact between the retailer systems and the service activation component (e.g., page 7, lines 7-10), the service gateway providing controlled access, by the retailer systems, to the services provided by the service activation component (e.g., page 7, lines 10-14), the service gateway permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access (e.g., page 4, lines 3-5), the service gateway comprising: a first interface module (e.g., Figure 2, 210) to receive, from one of the retailer systems, a message requesting performance of one of the services by the service activation component (e.g., page 7, lines 17-19; page 13, line 18 – page 14, line 18), the message including at least one argument that includes data useful for performing the one service (e.g., Figure 3, 330; page 10, lines 9-15), an access control module (e.g., Figure 2, 220) to: make a first determination of whether the one retailer system is permitted to request performance of the one service (e.g., page 11, lines 4-5; page 14, line 22 – page 15, line 2), make a second determination of whether the at least one argument is permissible for the one retailer system (e.g., page 11, lines 5-8; page 15, lines 2-5), and make a third determination of whether the at least one argument is valid for the one service (e.g., page 11, lines 5-8; page 15, lines 2-5), and a second interface module (e.g., Figure 2, 230) to selectively interact with the service activation component based, at least in part, on the first, second, and third determinations of the access control module (e.g., page 12, lines 3-11; page 15, lines 10-18).

Claim 31 recites a method (e.g., Figures 5A and 5B) performed in a network (e.g., Figure 1, 100) that includes a service gateway (e.g., Figure 1, 130) in communication with a first entity (e.g., Figure 1, 120) and a second entity (e.g., Figure 1, 140), the method comprising: receiving, from the first entity, a message requesting performance of a network service of an extensible set of network services offered by the second entity (e.g., page 7, lines 17-19; page 13, line 18 – page 14, line 18), the message including a service name that corresponds to the network service (e.g., Figure 3, 320; page 10, lines 5-8) and an argument that includes data useful in performing the network service (e.g., Figure 3, 330; page 10, lines 9-15); generating a first result based, at least in part, on a determination of whether the first entity is permitted to request performance of the network service corresponding to the service name (e.g., page 11, lines 4-5; page 14, line 22 - page 15, line 2); generating a second result based, at least in part, on a determination of whether the first entity is permitted to provide the argument (e.g., page 11, lines 5-8; page 15, lines 2-5); generating a third result based, at least in part, on a determination of whether the argument is permissible for the network service corresponding to the service name (e.g., page 11, lines 5-8; page 15, lines 2-5); and selectively requesting performance of the network service by the second entity based, at least in part, on the first, second, and third results (e.g., page 12, lines 3-11; page 15, lines 10-18).

Claim 35 recites a system (e.g., Figure 1, 130), comprising: means for receiving, from a requestor, a message requesting performance of one of a plurality of network services offered by a server (e.g., Figure 2, 210; page 9, line 12 – page 10, line 15), the message including an argument that includes data useful in performing the one network service (e.g., Figure 3, 330; page 10, lines 9-15); means for performing a first determination of whether the requestor is

permitted to request performance of the one network service (e.g., Figure 2, 220; page 11, lines 4-5; page 14, line 22 – page 15, line 2); means for performing a second determination of whether the requestor is permitted to provide the argument (e.g., Figure 2, 220; page 11, lines 5-8; page 15, lines 2-5); means for performing a third determination of whether the argument is permissible for the one network service (e.g., Figure 2, 220; page 11, lines 5-8; page 15, lines 2-5); and means for requesting performance of the one network service by the server based, at least in part, on the first, second, and third determinations (e.g., Figure 2, 230; page 12, lines 3-11; page 15, lines 10-18).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1, 8-12, 16, 20-24, 26-29, 31, and 33-35 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Rao in view of Chandrashekhar et al.
- B. Claims 2 and 18 stand rejected under 35 U.S.C. § 103(a) as unpatentable Rao in view of Chandrashekhar et al. and Hochmuth et al.

#### VII. ARGUMENT

A. The Rejection of Claims 1, 8-12, 16, 20-24, 26-29, 31, and 33-35 Under 35 U.S.C. § 103(a) Based on Rao and Chandrashekhar et al. Should be Reversed.

The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Examiner. <u>In re Oetiker</u>, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. In re Warner, 379 F.2d 1011, 154 USPQ 173

(CCPA 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by <u>Graham v. John Deere Co.</u>, 86 S.Ct. 684, 383 U.S. 1, 148 USPQ 459 (1966). <u>KSR International Co. v. Teleflex Inc.</u>, 550 U.S. \_\_\_\_\_\_\_, 127 S. Ct. 1727 (2007). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. <u>Uniroyal, Inc. v. Rudkin-Wiley Corp.</u>, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

1. Claims 1, 9, 12, 23, 24, and 33.

Independent claim 23 is directed to a system that comprises a service gateway in communication with a first entity and a second entity, the service gateway comprising: a first interface module to receive, from the first entity, a message requesting performance of a service in an extensible set of services offered by the second entity, the message including a service name that corresponds to the service and an argument that includes data useful in performing the service; an access control module to: make a first determination of whether the first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be provided by the first entity, and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name; and a second interface module to selectively request performance of the service by the second entity based, at least in part, on results of the first, second, and third determinations of the access control module.

Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, do not disclose or suggest the combination of features recited in claim 23. For example, Rao and

Chandrashekhar et al. do not disclose or suggest a service gateway that includes, among other things, an access control module to make a first determination of whether a first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be provided by the first entity, and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name, as recited in claim 23.

The Examiner alleged that Rao discloses an access control module 1600 that makes a first determination of whether a first entity 30 is permitted to request performance of a service. Final Office Action, page 6. The Examiner admitted that Rao does not disclose that access control module 1600 makes a second determination of whether an argument is permitted to be provided by the first entity, and makes a third determination of whether the argument is permitted to be requested for the service corresponding to the service name. Final Office Action, page 6. The Examiner alleged, however, that Chandrashekhar et al. discloses making the first determination, the second determination, and the third determination, and cited paragraphs 0031 and 0032 of Chandrashekhar et al. for support. Final Office Action, page 7. Appellants submit that the disclosure of Chandrashekhar et al. provides absolutely no support for the Examiner's allegations.

In paragraph 0031, Chandrashekhar et al. discloses:

The EU selects services/applications from the list of available services/applications and submits a request for selected service(s)/applications(s). The information indicative of the requested services/applications and associated attributes (customization features) are referred to as an application request (AR). The AR is received by the system 100 at step 62. In an exemplary embodiment, the AR is provided via a Web-based interface in hypertext markup language (HTML) form. During creation of the AR, the EU may select available services/applications, and also customize services/applications as desired. Examples of customization information include the time to provide a service/application,

the data rate at which to provide a service/application, specific phone numbers from which to accept collect calls, the total maximum cost limit for all requested services/application provided during a certain time frame, e.g., month, the resolution at which to provide a movie, specific phone numbers to which calls should be forwarded, geographic limitations on acceptance of collect calls. For example, an EU may want to view an online-hosted movie. She may specify that the movie be provided at a specific time during off-peak hours and at a lower resolution to minimize expense. Similarly, the EU may specify the amount that she wants to pay.

In this section, Chandrashekhar et al. discloses that an end user (EU) submits a request for selected services/applications via an application request (AR) that identifies the services/applications and associated attributes (customization features) desired by the EU. Even assuming, for the sake of argument, that an EU can be equated to a first entity, that the services/applications can be equated to a service with a corresponding service name, and that the attributes can be equated to an argument that includes data useful in performing the service (points that Appellants do not concede), Appellants submit that Chandrashekhar et al. does not disclose or suggest, for example, making a determination of whether an attribute is permitted to be provided by the EU, or making a determination of whether an attribute is permitted to be requested for a requested service/application, as would be required by claim 23 based on this interpretation of Chandrashekhar et al.

Rather, <u>Chandrashekhar et al.</u> discloses making a comparison of the requested services/applications, as tailored by the customization information, with available services/applications and information contained in EU and service/application profiles.

Paragraph 0034. <u>Chandrashekhar et al.</u> does not disclose or suggest that this comparison entails making a determination of whether an attribute <u>is permitted to be provided</u> by the EU, or making a determination of whether an attribute <u>is permitted to be requested</u> for a requested service/application, as would be required by claim 23 based on this interpretation of

<u>Chandrashekhar et al.</u> Any allegations to the contrary are based on mere speculation. Thus, <u>Chandrashekhar et al.</u> does not disclose or suggest an access control module to make a first determination of whether a first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be provided by the first entity, and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name, as recited in claim 23.

# At paragraph 0032, Chandrashekhar et al. discloses:

An authorized EU may customize an AR in accordance with predefined parameters, e.g., privileges and constraints, assigned to that EU. The predefined parameters are determined, in part, by a selected ASP(s) in accordance with information concerning the requested service/application and system configuration available from the user profiles and service/application profiles contained in the CRM portion 14 and the SCM portion 16, respectively. However, the system 100 provides an authorized EU means for modifying these parameters for specific services/applications. These predefined parameters may be in the form of constraints and/or privileges. For example, constraints associated with a call forwarding feature may include: User A can initiate call forwarding to anywhere in USA, but not to international locations; and User B can forward the calls anywhere, in association with a unified messaging service. Other examples of constraints and privileges include providing an EU with means to automatically accept collect calls from a designated source between 8:00 p.m. and 12:00 p.m. (EU's local time); provide an authentication scheme for third-party charging; modify attributes associated with IPbased applications based on quality of service (QoS), time of day, user and service/application specific attributes; and/or authentication by different methods such as password or speaker verification.

In this section, <u>Chandrashekhar et al.</u> discloses that an authorized EU can customize an AR with predefined parameters and can modify these parameters for specific services/applications. Even assuming, for the sake of argument, that an EU can be equated to a first entity, that the services/applications can be equated to a service with a corresponding service name, and that a parameter can be equated to an argument that includes data useful in performing the service (points that Appellants do not concede), Appellants submit that <u>Chandrashekhar et al.</u> does not

disclose or suggest, for example, making a determination of whether a parameter is permitted to be provided by the EU, or making a determination of whether a parameter is permitted to be requested for a requested service/application, as would be required by claim 23 based on this interpretation of <u>Chandrashekhar et al.</u>

Rather, Chandrashekhar et al. discloses making a comparison of the requested services/applications, as tailored by the customization information, with available services/applications and information contained in EU and service/application profiles.

Paragraph 0034. Chandrashekhar et al. does not disclose or suggest that this comparison entails making a determination of whether a parameter is permitted to be provided by the EU, or making a determination of whether a parameter is permitted to be requested for a requested service/application, as would be required by claim 23 based on this interpretation of Chandrashekhar et al. Any allegation to the contrary is based on mere speculation. Thus, Chandrashekhar et al. does not disclose or suggest an access control module to make a first determination of whether a first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be provided by the first entity, and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name, as recited in claim 23.

In the Advisory Action, the Examiner newly cited to paragraphs 0034 and 0035 of Chandrashekhar et al. for allegedly disclosing the above-identified features of claim 23.

Advisory Action, page 2. Appellants submit that the Examiner's interpretation of Chandrashekhar et al. is unreasonable.

In paragraph 0034, Chandrashekhar et al. discloses:

Referring to FIG. 5B, the system 100 processes the AR at step 64. Processing the AR includes comparing the requested services/applications, as tailored by the customization information, with available services/applications and the information contained in the EU and service/application profiles. If no matches are found at step 66, an appropriate message and opportunity to retry are provided at step 68. If the EU decides not to retry, the process is halted at step 74. If the EU decides to retry (step 68), the process continues from step 58 (FIG. 5A).

In this section, <u>Chandrashekhar et al.</u> discloses comparing requested services/applications, as tailored by customization information, with available services/applications and information contained in EU and service/application profiles. The Examiner alleged that this comparison is equivalent to making a second determination of whether an argument is permitted to be provided by the first entity. Advisory Action, page 2. Appellants submit that the Examiner's allegation is unreasonable.

Chandrashekhar et al. discloses that the available services/applications contain information representative of services/applications available to an EU, such as existing services/applications, new services/applications, and/or temporary services/applications.

Paragraph 0021. Chandrashekhar et al. also refers to these available services/applications as service/application profiles. Paragraph 0022. Chandrashekhar et al. discloses that the EU profile includes information representative of an EU's preferences and transactions with application/service providers. Paragraph 0019.

Thus, in paragraph 0034, <u>Chandrashekhar et al.</u> simply discloses comparing information contained in an application request (AR) (i.e., information requesting a particular service/application) to information contained in preferences of an EU and a list of the available services/applications to determine whether the particular service/application can be provided to

the EU. See, also, paragraph 0022. At best, this disclosure of Chandrashekhar et al. may be considered equivalent to making a first determination of whether a first entity is permitted to request performance of a service corresponding to a service name by comparing information in the AR issued by the EU to information contained in preferences of the EU and the list of available services/application. Contrary to the Examiner's allegation, nowhere does

Chandrashekhar et al. disclose or suggest making a determination of whether an argument is permitted to be provided by a first entity. Thus, Chandrashekhar et al. does not disclose or suggest an access control module to make a first determination of whether a first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be requested for the service corresponding to the service name, as recited in claim 23.

#### In paragraph 0035, Chandrashekhar et al. discloses:

Matches may not be found for any of several reasons, such as the requested service/application is not available at the requested time, resolution, etc. A match may not be found if the EU customer premises equipment (CPE), such as modem type or descrambler are not compatible with the requested service/application. The system 100 also compares the AR with the CPE profile stored in the CRM portion 14 and/or the SCM portion 16. If the requested service/application cannot be fulfilled with the existing CPE setup (as indicated in the CPE profile), the system 100 provides the necessary feedback to the EU. The EU then has the option to subscribe to a new service in accordance with the feedback information. It is advantageous if the requested services/applications are compatible with the EU's CPE capabilities. For example, if the EU chooses a 384 Kb/s Internet access and has only a V.90 modem, the 384 Kb/s type services and/or grade of service requested will not work on a V.90 modem. In an attempt to avoid these types of conflicts, the system 100 provides the appropriate CPE requirements to the EU. The EU may then determine if she has the appropriate equipment before requesting a service/application.

In this section, <u>Chandrashekhar et al.</u> discloses determining whether the EU's customer premises equipment (CPE) is compatible with the requested service/application by analyzing a CPE

profile. The Examiner alleged that this determination is equivalent to making a third determination of whether the argument is permitted to be requested for the service corresponding to the service name. Advisory Action, page 2. Appellants submit that the Examiner's allegation is unreasonable.

Chandrashekhar et al. provides an example of determining whether an EU's equipment is compatible with a requested service/application as a situation where an EU requests a 384 Kb/s Internet access but the EU has a V.90 modem that cannot handle the requested 384 Kb/s service. At best, this section of Chandrashekhar et al. may be considered equivalent to making a first determination of whether a first entity is permitted to request performance of a service corresponding to a service name by determining whether the EU's equipment is compatible with the requested service/application. Contrary to the Examiner's allegation, nowhere does Chandrashekhar et al. disclose or suggest making a determination of whether an argument is permitted to be requested for a particular service. Thus, Chandrashekhar et al. does not disclose or suggest an access control module to make a first determination of whether a first entity is permitted to request performance of the service corresponding to the service name, make a second determination of whether the argument is permitted to be provided by the first entity, and make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name, as recited in claim 23.

The Examiner also alleged that it would have been obvious to modify the common service platform and software of Rao to provide access based on a message received that includes services/applications and associated attributes, as allegedly disclosed by Chandrashekhar et al., "since a unique identifier and associated information is needed for end-

user identification and authentication." Final Office Action, page 7. Appellants submit that the Examiner's reason for combining Rao and Chandrashekhar et al. falls short of establishing a prima facie case of obviousness. The Examiner's allegation does not explain how making a determination of whether an argument is permitted to be provided by a first entity or making a determination of whether an argument is permitted to be requested for a service corresponding to a service name can reasonably be equated to a "unique identifier and associated information" that is "needed for end-user identification and authentication." Thus, the Examiner has not established a prima facie case of obviousness with regard to claim 23.

For at least these reasons, it is respectfully submitted that claim 23 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 23 is respectfully requested.

Claims 1, 9, 12, 24, and 33 depend from claim 23. Claims 1, 9, 12, 24, and 33 are, therefore, also patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103 for at least the reasons given with regard to claim 23.

#### 2. Claim 8.

Dependent claim 8 recites that the first entity corresponds to a business partner system and the second entity corresponds to a service activation component, the service activation component provides the service to a customer associated with the business partner system, the business partner system generates the message requesting service for the customer; and wherein the first interface module is further configured to authenticate the business partner system based, at least in part, on information included in the message.

Initially, claim 8 depends from claim 23. Therefore, claim 8 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u> for at least the reasons given with regard to claim 23.

Further, <u>Rao</u> and <u>Chandrashekhar et al.</u> do not disclose the features of claim 8. The Examiner alleged that <u>Rao</u> discloses business partner systems as item 31. Final Office Action, page 3. <u>Rao</u> discloses item 31 as a gateway that converts protocols in the users' devices into the protocols used in the network so that the CSP can communicate with the end users. Paragraph 0022.

Contrary to the Examiner's allegation, Rao does not disclose or remotely suggest that gateway 31 generates a message requesting service for a customer, or a first interface module that is further configured to authenticate gateway 31 based, at least in part, on information included in the message, as would be required by claim 8 based on the Examiner's interpretation of Rao. Thus, gateway 31 cannot reasonably be equated to a business partner system, as recited in claim 8. Therefore, Rao does not disclose or suggest a business partner system that generates a message requesting service for a customer, or a first interface module that is configured to authenticate the business partner system based, at least in part, on information included in the message, as recited in claim 8.

For at least these reasons, it is respectfully submitted that claim 8 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 8 is respectfully requested.

#### 3. Claim 10.

Dependent claim 10 recites that the message includes a subscriber identifier that identifies a subscriber on whose behalf the service is being requested; and wherein the second

entity locator is configured to map the subscriber identifier to the identified one of the service activation components.

Initially, claim 10 depends from claim 9 (which further depends from claim 23).

Therefore, claim 10 is patentable over Rao and Chandrashekhar et al. for at least the reasons given with regard to claim 9.

Further, <u>Rao</u> and <u>Chandrashekhar et al.</u> do not disclose the features of claim 10. The Examiner did not address these features, but merely alleged that <u>Rao</u> discloses the features of claim 9. Final Office Action, pages 4-5. Therefore, the Examiner did not establish a prima facie case of obviousness with regard to claim 10.

Nevertheless, Appellants submit that neither Rao nor Chandrashekhar et al., whether taken alone or in any reasonable combination, discloses or suggests, for example, a second entity locator that is configured to map a subscriber identifier, which identifies a subscriber on whose behalf a requested service is being requested and which is included in a received message, to the identified one of the service activation components, as recited in claim 10. The Examiner alleged that an application profile of application registration service 180 in Rao corresponds to a second entity locator. Final Office Action, page 4. Rao does not disclose or suggest, however, that an application profile of application registration service 180 maps a subscriber identifier, which identifies a subscriber on whose behalf a requested service is being requested and which is included in a received message, to one of the service activation components, as recited in claim 10. Rather Rao discloses that an application profile in application registration service 180 acts as an information nexus for applications and includes application identifiers, security registers, and categories. Paragraph 0045. Thus, Rao does not disclose or suggest a second entity locator

that is configured to map a subscriber identifier, which identifies a subscriber on whose behalf a requested service is being requested and which is included in a received message, to the identified one of the service activation components, as recited in claim 10.

<u>Chandrashekhar et al.</u> also does not disclose or suggest a second entity locator that is configured to map a subscriber identifier, which identifies a subscriber on whose behalf a requested service is being requested and which is included in a received message, to the identified one of the service activation components, as recited in claim 10.

For at least these reasons, it is respectfully submitted that claim 10 is patentable over Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 10 is respectfully requested.

#### 4. Claim 11.

Dependent claim 11 recites an extension manager configured to facilitate at least one of modification of services in the extensible set of services or addition of new services to the extensible set of services offered by the second entity.

Initially, claim 11 depends from claim 23. Therefore, claim 11 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u> for at least the reasons given with regard to claim 23.

Further, <u>Rao</u> and <u>Chandrashekhar et al.</u> do not disclose this feature of claim 11. The Examiner did not address these features, but merely alleged that <u>Rao</u> discloses the features of claim 9. Final Office Action, pages 4-5. Therefore, the Examiner did not establish a prima facie case of obviousness with regard to claim 11.

For at least these reasons, it is respectfully submitted that claim 11 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35

U.S.C. § 103. Reversal of the rejection of claim 11 is respectfully requested.

#### 5. Claims 26-29.

Independent claim 26 is directed to a wholesaler system that provides services to subscribers associated with a plurality of retailer systems. The wholesaler system comprises a service activation component configured to provide the services to the subscribers; and a service gateway configured to act as a single point of contact between the retailer systems and the service activation component, the service gateway providing controlled access, by the retailer systems, to the services provided by the service activation component, the service gateway permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, the service gateway comprising: a first interface module to receive, from one of the retailer systems, a message requesting performance of one of the services by the service activation component, the message including at least one argument that includes data useful for performing the one service, an access control module to: make a first determination of whether the one retailer system is permitted to request performance of the one service, make a second determination of whether the at least one argument is permissible for the one retailer system, and make a third determination of whether the at least one argument is valid for the one service, and a second interface module to selectively interact with the service activation component based, at least in part, on the first, second, and third determinations of the access control module.

Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, do not disclose or suggest the combination of features recited in claim 26. For example, Rao and Chandrashekhar et al. do not disclose or suggest a service gateway configured to act as a single

point of contact between the retailer systems and the service activation component, the service gateway providing controlled access, by the retailer systems, to the services provided by the service activation component, the service gateway permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as recited in claim 26.

The Examiner alleged that <u>Rao</u> discloses these features, identifying item 1600 as allegedly corresponding to the service gateway, item 210 as allegedly corresponding to retailer systems, and items 201, 202, and 203, as allegedly corresponding to the service activation component, and citing paragraphs 0009, 0037, and 0085, of <u>Rao</u> for support. Final Office Action, page 8. Appellants submit that the disclosure of <u>Rao</u> provides no support for the Examiner's allegations.

Rao discloses item 1600 as a universal layer that comprises security services, including network and system security, application security, and operational security. Paragraph 0076.

Nowhere does Rao disclose or remotely suggest that universal layer 1600 acts as a single point of contact between retailer systems and a service activation component, that universal layer 1600 provides controlled access, by the retailer systems, to the services provided by the service activation component, and that universal layer 1600 permits each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as would be required by claim 26 based on the Examiner's interpretation of Rao.

Rao discloses item 210 as a services network that includes a services/applications layer, which is a platform for Internet protocol applications of all kinds, and that is communicable with application service providers 201, 202, and 203. Paragraphs 0024 and 0025. Nowhere does Rao

disclose or remotely suggest that universal layer 1600 acts as a single point of contact between services network 210 and a service activation component, that universal layer 1600 provides controlled access, by services network 210, to the services provided by the service activation component, and that universal layer 1600 permits each of the services networks 210 access to a subset of the services provided by the service activation component via the controlled access, as would be required by claim 26 based on the Examiner's interpretation of Rao.

Rao discloses items 201, 202, and 203 as application service providers that are communicable with service network 210 via landline or wireless communications. Paragraph 0024. Nowhere does Rao disclose or remotely suggest that universal layer 1600 acts as a single point of contact between services network 210 and an application service provider 201, 202, or 203, that universal layer 1600 provides controlled access, by services network 210, to the services provided by application service provider 201, 202, or 203, and that universal layer 1600 permits each of the services networks 210 access to a subset of the services provided by application service provider 201, 202, or 203 via the controlled access, as would be required by claim 26 based on the Examiner's interpretation of Rao.

Contrary to the Examiner's allegations, <u>Rao</u> discloses providing access by <u>users</u> to applications of third party providers. Paragraph 0084. <u>Rao</u> discloses that access rules can be used to support user classes or groups who will have access to different functionalities and data, and that access for each user can be customized. Paragraph 0085. Users clearly are not retailer systems, as recited in claim 26. As defined in Appellants' specification, a retailer owns a customer relationship with its subscribers and purchases services from one or more network service providers and sells these services to its subscribers. See, e.g., paragraph 0021 in

Appellants' specification. The term "user," as used by <u>Rao</u>, may be equivalent to a "subscriber," as used in Appellants' specification, but not a "retailer."

At paragraph 0009, Rao discloses:

The invention advantageously provides a mobile common service platform and software in telecommunications systems. A common service platform (CSP) according to the invention is an integrated platform that supports both wireless and landline mobile services and business transactions. A CSP system according to the invention includes a common service platform or CSP for integrating a plurality of applications into a single platform for multiple uses in a plurality of communications systems. The CSP is connected with the plurality of applications and a plurality of users. Multiple users in different communications systems having varied communications protocols can utilize generally the same application (as selected by the users) through the CSP. Requests for uses in different communications system are transferred to the CSP for conversion into generally the same format that is acceptable by a selected application. Outputs from the selected application are transferred into formats that are acceptable by the requesting user. The CSP system advantageously enables a communications system to be quickly offered to market in conjunction with value-added services through applications rendered by third party service providers.

In this section, Rao discloses a common service platform (CSP) that connects between a plurality of applications and a plurality of users. Even assuming for the sake of argument, that the CSP can be equated to a service gateway (a point that Appellants do not concede), nowhere in this section, or elsewhere, does Rao disclose or suggest that the CSP is configured to act as a single point of contact between retailer systems and a service activation component, the CSP providing controlled access, by the retailer systems, to the services provided by the service activation component, the CSP permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as would be required by claim 26 based on this interpretation of Rao.

At paragraph 0037, Rao discloses:

The invention advantageously combines known objects (integration of legacy systems) through a communications structure (such as a connectivity layer) by coupling them to a telecommunications network, where the known objects are efficiently distributed to end

users of the network. Using a layered architecture, the complexity of myriad services and applications delivered to and received by a multitude of users by a plethora of service providers is overcome in an efficient and optimal manner, which further provides capability for management and billing efficiency and convenience. Simplicity, efficiency, and facility of use are advantageously achieved by a defined, standardized architecture using a plurality of readily available modules and interfaces. The modules and interfaces are re-useable for different services and applications, but also can be reformulated for specific applications as the need arises. For example, if a revenue-sharing billing percentage is changed to reflect new contractual agreements or changed market conditions, a simplistic change in the module utilizing a dynamically configurable matrix advantageously allows different percentages to be entered, where the changed module thereafter will provide the desired result.

In this section, Rao discloses a communications structure that facilitates the delivering of services and applications to users. Even assuming, for the sake of argument, that the communications structure can be equated to a service gateway (a point that Appellants do not concede), nowhere in this section, or elsewhere, does Rao disclose or suggest that the communications structure is configured to act as a single point of contact between retailer systems and a service activation component, the communications structure providing controlled access, by the retailer systems, to the services provided by the service activation component, the communications structure permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as would be required by claim 26 based on this interpretation of Rao.

### At paragraph 0085, Rao discloses:

For authentication, a user ID or password (such as one having a minimum length) will be required for authenticating Internet end users for accessing the common service platform or CSP according to the invention. Subscriber identity module or SIM cards are used for authenticating mobile CSP users. A session expiration or timeout after a certain time period is also available. For access control, the CSP system according to the invention allows administration of access rules within a plurality of applications, and supports multiple user classes or groups, each having access to different functionalities and data. The CSP system can further include the capability to customize access for each user, e.g., by overriding the group access protocols. For network administration, the CSP according to the invention utilizes the concept of data zones for its systems. Exemplary data zones includes a red zones where systems are completely untrusted, such as any system on

external networks, a yellow zone having somewhat trusted systems generally including systems that communicate externally, and a green zone having trusted systems generally including internal core-business systems. Firewalls stand on zone boundaries. No persistent application data (as identified in terms of data sensitivity) will be stored on yellow or red zone systems, except session data. There are generally no connections between red and green zone systems. Firewall rules ensure that only authorized yellow zone hosts can contact green zone hosts.

In this section, Rao discloses that users are authenticated for accessing the CSP, that the CSP supports user classes or groups who will each have access to different functionalities and data, and that the CSP can customize access for each user. Even assuming, for the sake of argument, that the CSP can be equated to a service gateway (a point that Appellants do not concede), nowhere in this section, or elsewhere, does Rao disclose or suggest that the CSP is configured to act as a single point of contact between retailer systems and a service activation component, the CSP providing controlled access, by the retailer systems, to the services provided by the service activation component, the CSP permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as would be required by claim 26 based on this interpretation of Rao.

Chandrashekhar et al. also does not disclose or suggest a service gateway configured to act as a single point of contact between retailer systems and a service activation component, the service gateway providing controlled access, by the retailer systems, to the services provided by the service activation component, the service gateway permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access, as recited in claim 26.

Rao and Chandrashekhar et al. also do not disclose or suggest an access control module to make a first determination of whether the one retailer system is permitted to request

performance of the one service, make a second determination of whether the at least one argument is permissible for the one retailer system, and make a third determination of whether the at least one argument is valid for the one service, as further recited in claim 26, for at least reasons similar to the reasons given with regard to claim 23.

The Examiner also alleged that it would have been obvious to modify the common service platform and software of Rao to provide access based on a message received that includes services/applications and associated attributes, as allegedly disclosed by Chandrashekhar et al., "since a unique identifier and associated information is needed for enduser identification and authentication." Final Office Action, page 10. Appellants submit that the Examiner's reason for combining Rao and Chandrashekhar et al. falls short of establishing a prima facie case of obviousness for at least reasons similar to the reasons given with regard to claim 23.

For at least these reasons, it is respectfully submitted that claim 26 is patentable over Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 26 is respectfully requested.

Claims 27-29 depend from claim 26. Claims 27-29 are, therefore, also patentable over Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103 for at least the reasons given with regard to claim 26.

6. Claims 16, 20, 22, 31, and 34.

Independent claim 31 is directed to a method performed in a network that includes a service gateway in communication with a first entity and a second entity. The method comprises receiving, from the first entity, a message requesting performance of a network service of an

extensible set of network services offered by the second entity, the message including a service name that corresponds to the network service and an argument that includes data useful in performing the network service; generating a first result based, at least in part, on a determination of whether the first entity is permitted to request performance of the network service corresponding to the service name; generating a second result based, at least in part, on a determination of whether the first entity is permitted to provide the argument; generating a third result based, at least in part, on a determination of whether the argument is permissible for the network service corresponding to the service name; and selectively requesting performance of the network service by the second entity based, at least in part, on the first, second, and third results.

Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, do not disclose or suggest the combination of features recited in claim 31. For example, Rao and Chandrashekhar et al. do not disclose or suggest generating a second result based, at least in part, on a determination of whether the first entity is permitted to provide the argument; and generating a third result based, at least in part, on a determination of whether the argument is permissible for the network service corresponding to the service name, as recited in claim 31.

The Examiner admitted that <u>Rao</u> does not disclose or suggest making a second determination of whether the argument is permitted to be provided by the first entity and making a third determination of whether the argument is permitted to be requested for the service corresponding to the service name. Final Office Action, page 6. The Examiner alleged, however, that <u>Chandrashekhar et al.</u> discloses making the second determination and the third determination, and cited paragraphs 0031 and 0032 of <u>Chandrashekhar et al.</u> for support. Final

Office Action, page 7. Appellants submit that the disclosure of <u>Chandrashekhar et al.</u> provides absolutely no support for the Examiner's allegations for at least reasons similar to the reasons given with regard to claim 23.

In the Advisory Action, the Examiner newly cited to paragraphs 0034 and 0035 of Chandrashekhar et al. for allegedly disclosing the above-identified features. Advisory Action, page 2. Appellants submit that the Examiner's interpretation of Chandrashekhar et al. is unreasonable for at least reasons similar to the reasons given with regard to claim 23.

The Examiner also alleged that it would have been obvious to modify the common service platform and software of Rao to provide access based on a message received that includes services/applications and associated attributes, as allegedly disclosed by Chandrashekhar et al., "since a unique identifier and associated information is needed for enduser identification and authentication." Final Office Action, page 7. Appellants submit that the Examiner's reason for combining Rao and Chandrashekhar et al. falls short of establishing a prima facie case of obviousness for at least reasons similar to the reasons given with regard to claim 23.

For at least these reasons, it is respectfully submitted that claim 31 is patentable over Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 31 is respectfully requested.

Claims 16, 20, 22, and 34 depend from claim 31. Claims 16, 20, 22, and 34 are, therefore, also patentable over Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103 for at least the reasons given with regard to claim 31.

#### 7. Claim 21.

Dependent claim 21 recites that the message includes a subscriber identifier that identifies a subscriber on whose behalf the requested service is being requested; and wherein the method further comprises identifying the second entity from a plurality of second entities based, at least in part, on the subscriber identifier included in the message.

Initially, claim 21 depends from claim 31. Therefore, claim 21 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u> for at least the reasons given with regard to claim 31.

Further, <u>Rao</u> and <u>Chandrashekhar et al.</u> do not disclose the features of claim 21. The Examiner did not address the features of claim 21. Final Office Action, pages 5-7. Thus, the Examiner did not establish a prima facie case of obviousness with regard to claim 21.

For at least these reasons, it is respectfully submitted that claim 21 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 21 is respectfully requested.

#### 8. Claim 35.

Independent claim 35 is directed to a system that comprises means for receiving, from a requestor, a message requesting performance of one of a plurality of network services offered by a server, the message including an argument that includes data useful in performing the one network service; means for performing a first determination of whether the requestor is permitted to request performance of the one network service; means for performing a second determination of whether the requestor is permitted to provide the argument; means for performing a third determination of whether the argument is permissible for the one network service; and means for

requesting performance of the one network service by the server based, at least in part, on the first, second, and third determinations.

Rao and Chandrashekhar et al., whether taken alone or in any reasonable combination, do not disclose the combination of features recited in claim 35. For example, Rao and Chandrashekhar et al. do not disclose or suggest means for performing a second determination of whether the requestor is permitted to provide the argument; and means for performing a third determination of whether the argument is permissible for the one network service, as recited in claim 31.

The Examiner admitted that <u>Rao</u> does not disclose or suggest making a second determination of whether the argument is permitted to be provided by the first entity and making a third determination of whether the argument is permitted to be requested for the service corresponding to the service name. Final Office Action, page 6. The Examiner alleged, however, that <u>Chandrashekhar et al.</u> discloses making the second determination and the third determination, and cited paragraphs 0031 and 0032 of <u>Chandrashekhar et al.</u> for support. Final Office Action, page 7. Appellants submit that the disclosure of <u>Chandrashekhar et al.</u> provides absolutely no support for the Examiner's allegations for at least reasons similar to the reasons given with regard to claim 23.

In the Advisory Action, the Examiner newly cited to paragraphs 0034 and 0035 of Chandrashekhar et al. for allegedly disclosing the above-identified features. Advisory Action, page 2. Appellants submit that the Examiner's interpretation of Chandrashekhar et al. is unreasonable for at least reasons similar to the reasons given with regard to claim 23.

The Examiner also alleged that it would have been obvious to modify the common

service platform and software of <u>Rao</u> to provide access based on a message received that includes services/applications and associated attributes, as allegedly disclosed by <u>Chandrashekhar et al.</u>, "since a unique identifier and associated information is needed for enduser identification and authentication." Final Office Action, page 7. Appellants submit that the Examiner's reason for combining <u>Rao</u> and <u>Chandrashekhar et al.</u> falls short of establishing a prima facie case of obviousness for at least reasons similar to the reasons given with regard to claim 23.

For at least these reasons, it is respectfully submitted that claim 35 is patentable over <u>Rao</u> and <u>Chandrashekhar et al.</u>, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 35 is respectfully requested.

# B. The Rejection of Claims 2 and 18 Under 35 U.S.C. § 103(a) Based on Rao, Chandrashekhar et al., and Hochmuth et al. Should be Reversed.

#### 1. Claim 2.

Dependent claim 2 recites that the service activation component is configured to configure a router to deliver the service.

Initially, claim 2 depends from claim 1. The disclosure of <u>Hochmuth et al.</u> does not cure the deficiencies in the disclosures of <u>Rao</u> and <u>Chandrashekhar et al.</u> identified above with regard to claim 1. Claim 2 is, therefore, patentable over <u>Rao</u>, <u>Chandrashekhar et al.</u>, and <u>Hochmuth et al.</u> for at least the reasons given with regard to claim 1.

The Examiner alleged that it would have been obvious to modify the CSP and software of Rao to provide the capability to configure a router, as allegedly disclosed by Hochmuth et al., "to

make the combination permit or deny access to a network resource 42 through any network connection, and/or configuring a firewall." Final Office Action, pages 10-11. Appellants submit that the Examiner's reasons for combining Hochmuth et al. with Rao lack merit. The Examiner has not explained how permitting or denying access to a network resource or configuring a firewall, even if added to the system of Rao, would transform the Rao system to configure a router to provide a service in an extensible set of services offered by a second entity, as recited claim 2.

Moreover, <u>Rao</u> does not even mention a router. Therefore, the Examiner's general allegation of an alleged benefit that the combination would obtain does not address the feature of claim 2 that recites a service activation component that is configured to configure a router to deliver a service in an extensible set of services offered by a second entity.

For at least these reasons, it is respectfully submitted that claim 2 is patentable over Rao, Chandrashekhar et al., and Hochmuth et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 2 is respectfully requested.

#### 2. Claim 18.

Dependent claim 18 recites configuring a router to deliver the network service to a subscriber.

Initially, claim 18 depends from claim 31. The disclosure of <u>Hochmuth et al.</u> does not cure the deficiencies in the disclosures of <u>Rao</u> and <u>Chandrashekhar et al.</u> identified above with regard to claim 31. Claim 18 is, therefore, patentable over <u>Rao</u>, <u>Chandrashekhar et al.</u>, and <u>Hochmuth et al.</u> for at least the reasons given with regard to claim 31.

The Examiner alleged that it would have been obvious to modify the CSP and software of Rao to provide the capability to configure a router, as allegedly disclosed by Hochmuth et al., "to make the combination permit or deny access to a network resource 42 through any network connection, and/or configuring a firewall." Final Office Action, pages 10-11. Appellants submit that the Examiner's reasons for combining Hochmuth et al. with Rao lack merit. The Examiner has not explained how permitting or denying access to a network resource or configuring a firewall, even if added to the system of Rao, would transform the Rao system to configure a router to provide a network service in an extensible set of network services offered by a second entity, as recited claim 18.

Moreover, <u>Rao</u> does not even mention a router. Therefore, the Examiner's general allegation of an alleged benefit that the combination would obtain does not address the feature of claim 18 that recites configuring a router to deliver a network service in an extensible set of network services offered by a second entity.

For at least these reasons, it is respectfully submitted that claim 18 is patentable over Rao, Chandrashekhar et al., and Hochmuth et al., whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 18 is respectfully requested.

#### VIII. CONCLUSION

In view of the foregoing arguments, Appellants respectfully solicit the Honorable Board to reverse the Examiner's rejections of claims 1, 2, 8-12, 16, 18, 20-24, 26-29, 31, and 33-35 under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess

fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, L.L.P.

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#### **CLAIM APPENDIX**

1. The system of claim 23, where the second entity includes: a service activation component offering the extensible set of services.

- 2. The system of claim 1, wherein the service activation component is configured to configure a router to deliver the service.
- 8. The system of claim 23, wherein the first entity corresponds to a business partner system and the second entity corresponds to a service activation component, the service activation component provides the service to a customer associated with the business partner system, the business partner system generates the message requesting service for the customer; and

wherein the first interface module is further configured to:

authenticate the business partner system based, at least in part, on information included in the message.

9. The system of claim 23, wherein the first entity includes a plurality of service activation components; and

wherein the system further comprises:

a second entity locator configured to obtain information associated with the service activation components; and

wherein the second interface module is further configured to:

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contact the second entity locator to identify one of the service activation

components from which to request performance of the service.

10. The system of claim 9, wherein the message includes a subscriber identifier that

identifies a subscriber on whose behalf the service is being requested; and

wherein the second entity locator is configured to map the subscriber identifier to the

identified one of the service activation components.

11. The system of claim 23, further comprising:

an extension manager configured to facilitate at least one of modification of services in

the extensible set of services or addition of new services to the extensible set of services offered

by the second entity.

12. The system of claim 23, wherein the extensible set of services includes network

services associated with communication on the Internet.

16. The method of claim 31, further comprising:

rejecting the message if the first result indicates that the first entity is not permitted to

request performance of the network service, the second result indicates that the first entity is not

permitted to provide the argument, or the third result indicates that the argument is not

permissible for the network service.

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- 18. The method of claim 31, further comprising: configuring a router to deliver the network service to a subscriber.
- 20. The method of claim 31, further comprising: authenticating the first entity based, at least in part, on information included in the message.
- 21. The method of claim 31, wherein the message includes a subscriber identifier that identifies a subscriber on whose behalf the requested service is being requested; and wherein the method further comprises identifying the second entity from a plurality of second entities based, at least in part, on the subscriber identifier included in the message.
- 22. The method of claim 31, wherein the extensible set of network services includes network services associated with communication on the Internet.
  - 23. A system, comprising:

a service gateway in communication with a first entity and a second entity, the service gateway comprising:

a first interface module to receive, from the first entity, a message requesting performance of a service in an extensible set of services offered by the second entity, the message including a service name that corresponds to the service and an argument that includes data useful in performing the service;

an access control module to:

make a first determination of whether the first entity is permitted to request performance of the service corresponding to the service name,

make a second determination of whether the argument is permitted to be provided by the first entity, and

make a third determination of whether the argument is permitted to be requested for the service corresponding to the service name; and a second interface module to selectively request performance of the service [[on]] by the second entity based, at least in part, on results of the first, second, and third determinations of the access control module.

- 24. The system of claim 23, wherein the access control module is further configured to reject the if the message first determination determines that the first entity is not permitted to request performance of the service, the second determination determines that the argument is not permitted to be provided by the first entity, or the third determination determines that the argument is not permitted to be requested for the service.
- 26. A wholesaler system that provides services to subscribers associated with a plurality of retailer systems, the wholesaler system comprising:
- a service activation component configured to provide the services to the subscribers; and a service gateway configured to act as a single point of contact between the retailer systems and the service activation component, the service gateway providing controlled access,

by the retailer systems, to the services provided by the service activation component, the service gateway permitting each of the retailer systems access to a subset of the services provided by the service activation component via the controlled access,

the service gateway comprising:

a first interface module to receive, from one of the retailer systems, a message requesting performance of one of the services by the service activation component, the message including at least one argument that includes data useful for performing the one service,

an access control module to:

make a first determination of whether the one retailer system is permitted to request performance of the one service,

make a second determination of whether the at least one argument is permissible for the one retailer system, and

make a third determination of whether the at least one argument is valid for the one service, and

a second interface module to selectively interact with the service activation component based, at least in part, on the first, second, and third determinations of the access control module.

27. The wholesaler system of claim 26, wherein the services provided by the service activation component include network services.

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28. The wholesaler system of claim 26, wherein the services provided by the service activation component include an extensible set of services.

- 29. The wholesaler system of claim 26, wherein the service gateway and the service activation component in combination provide a common interface via which the retailer systems request one or more of the services provided by the service activation component, the combination exposing subsets of the common interface to each of the retailer systems by controlling access to the services by the retailer systems.
- 31. A method performed in a network that includes a service gateway in communication with a first entity and a second entity, the method comprising:

receiving, from the first entity, a message requesting performance of a network service of an extensible set of network services offered by the second entity, the message including a service name that corresponds to the network service and an argument that includes data useful in performing the network service;

generating a first result based, at least in part, on a determination of whether the first entity is permitted to request performance of the network service corresponding to the service name;

generating a second result based, at least in part, on a determination of whether the first entity is permitted to provide the argument;

generating a third result based, at least in part, on a determination of whether the argument is permissible for the network service corresponding to the service name; and

selectively requesting performance of the network service by the second entity based, at least in part, on the first, second, and third results.

- 33. The system of claim 23, where the second interface module is configured to request performance of the service when the first determination determines that the first entity is permitted to request performance of the service, the second determination determines that the argument is permitted to be provided by the first entity, and the third determination determines that the argument is permitted to be requested for the service.
- 34. The method of claim 31, where selectively requesting performance of the network service includes:

requesting performance of the network service when the first result indicates that the first entity is permitted to request performance of the network service, the second result indicates that the first entity is permitted to provide the argument, and the third result indicates that the argument is permissible for the network service.

#### 35. A system, comprising:

means for receiving, from a requestor, a message requesting performance of one of a plurality of network services offered by a server, the message including an argument that includes data useful in performing the one network service;

means for performing a first determination of whether the requestor is permitted to request performance of the one network service;

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means for performing a second determination of whether the requestor is permitted to provide the argument;

means for performing a third determination of whether the argument is permissible for the one network service; and

means for requesting performance of the one network service by the server based, at least in part, on the first, second, and third determinations.

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# IX. <u>EVIDENCE APPENDIX</u>

None

APPEAL BRIEF

PATENT Application No. 10/751,539 Docket No. 0023-0180

# X. RELATED PROCEEDINGS APPENDIX

None